

Pending Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) An optical sensor assembly comprising:
a housing;
only one light source within the housing, the light source being configured to emit light predominantly of a red color; and
sensors within the housing, the sensors being configured to detect diffuse and specular reflections of the light from an object.
2. (original) The optical sensor assembly of claim 1, wherein the housing includes a plurality of apertures against which the sensors are coaxially aligned, the apertures being shaped and positioned relative to the sensors to control resolution and energy collection of the sensors.
3. (original) The optical sensor assembly of claim 1, wherein the plurality of apertures are elongated slots that have substantially orthogonal longitudinal axes.
4. (original) The optical sensor assembly of claim 2, wherein the plurality of apertures include a diffuse reflection collecting aperture aligned at an angle of 90 degrees with respect to a measured surface of the object.
5. (original) The optical sensor assembly of claim 2, wherein the plurality of apertures include a specular reflection collecting aperture aligned at an angle of 56 degrees with respect to a measured surface of the object.
6. (original) The optical sensor assembly of claim 1, wherein the light source is configured to emit light with a maximum intensity corresponding to a wavelength, λ , of approximately 640 nm.
7. (original) The optical sensor assembly of claim 1, wherein the light source is a light emitting diode (LED).

8. (original) The optical sensor assembly of claim 1, wherein the light source is aligned at an angle of 56 degrees with respect to a measured surface of the object.

9. (original) The optical sensor assembly of claim 1, wherein the plurality of sensors are phototransistors (PTRs).

10-15. (withdrawn)

16. (original) An optical sensor assembly comprising:
a housing;
only one light source within the housing, the light source being configured to emit light predominantly of a red color; and
means for detecting diffuse and specular reflections of the light from an object.

17. (original) The optical sensor assembly of claim 16, wherein the light source is configured to emit light with a maximum intensity corresponding to a wavelength, λ , of approximately 640 nm.

18. (original) The optical sensor assembly of claim 16, wherein the light source is a light emitting diode (LED).

19. (original) The optical sensor assembly of claim 16, wherein the means for detecting includes a plurality of sensors within the housing.

20. (original) The optical sensor assembly of claim 19, wherein the plurality of sensors are phototransistors (PTRs).

21-56. (withdrawn)

57. (original) An imaging device comprising:
an optical sensor including
a housing,
only one light source within the housing, the light source being configured to emit light predominantly of a red color, and

sensors within the housing, the sensors being configured to detect diffuse and specular reflections of the light from an object; and
means for scanning the object with the optical sensor.

58. (withdrawn)